

What Is Claimed Is:

1. A composite material prepared by bonding rubber to the surface of a brass-plated material obtained by plating the surface of a substrate with brass or to the surface of a brass material by vulcanization, wherein

needle-like Cu-S-based reaction products are formed at the bonding interface between brass and rubber,

and wherein preheating is carried out at 80 to 120°C before vulcanization.

2. The rubber-bonded brass composite material according to Claim 1, wherein when the section of the bonding interface between brass and rubber is observed through a transmission electron microscope, 1 to 50 needle-like Cu-S-based reaction products having a length L of 10 nm or more and a ratio of the length L to the width W (L/W) of 5 or more are existent based on 1 μ m in the length of the section of the bonding interface.

3. The rubber-bonded brass composite material according to Claim 1, wherein the brass-plated material or brass material is a steel cord or bead wire for tires.

4. The rubber-bonded brass composite material according to Claim 3, wherein the composite material is a tire.